

WHAT IS CLAIMED IS:

1. A printhead comprising:
 - a plurality of printing elements for printing;
 - a block selection circuit for outputting a selection signal for selecting a block of a plurality of printing elements that can be simultaneously driven;
 - 5 a printing control circuit for outputting a driving signal for selectively driving said printing elements, together with the selection signal, to each of said printing elements in correspondence with image data; and
 - 10 input means for receiving external image data to be input to said printing control circuit,
 - wherein said input means is adapted to receive the image data and block selection data input to said block selection circuit in a bus format of a plurality of consecutive bits.
- 15 2. The printhead according to claim 1, wherein said input means is adapted to parallelly receive the image data over a plurality of signal lines.
- 20 3. The printhead according to claim 1, wherein said input means is adapted to receive data in units of 4 bits.
4. The printhead according to claim 1, wherein said block selection circuit includes a decoder.
5. The printhead according to claim 1, wherein said printing element performs printing by using heat energy.
- 25 6. The printhead according to claim 1, wherein said

printing element performs printing by discharging ink.

7. A printhead comprising:

a plurality of printing elements for printing;

a block selection circuit for outputting a selection

5 signal for selecting a block of a plurality of printing
elements that can be simultaneously driven;

10 a printing control circuit for outputting a driving
signal for selectively driving said printing elements,
together with the selection signal, to each of said printing

elements in correspondence with image data; and

input means for receiving external image data to be
input to said printing control circuit,

wherein said input means is adapted to receive the
image data in a bus format of a plurality of bits.

15 8. The printhead according to claim 7, wherein said input
means is adapted to parallelly receive the image data over
a plurality of signal lines.

9. The printhead according to claim 7, wherein said input
means is adapted to receive data in units of 4 bits.

20 10. The printhead according to claim 7, wherein said input
means is adapted to receive data input to said block selection
circuit together with the image data.

11. The printhead according to claim 7, wherein said input
means is adapted to continuously receive the image data and
25 data input to said block selection circuit.

12. The printhead according to claim 7, wherein said block

selection circuit includes a decoder.

13. The printhead according to claim 7, wherein said printing element performs printing by using heat energy.

14. The printhead according to claim 7, wherein said 5 printing element performs printing by discharging ink.

15. A printhead comprising:

a plurality of printing elements for printing;
a block selection circuit for outputting a selection signal for selecting a block of a plurality of printing 10 elements that can be simultaneously driven;

a printing control circuit for outputting a driving signal for selectively driving said printing elements, together with the selection signal, to each of said printing elements in correspondence with image data; and

15 input means for receiving external image data to be input to said printing control circuit,

wherein said input means is adapted to receive data associated with a printing element driving timing continuously with the image data.

20 16. The printhead according to claim 15, wherein a printing element driving time is set in accordance with the data associated with the driving timing.

17. The printhead according to claim 15, wherein said 25 input means is adapted to receive data input to said block selection circuit together with the image data.

18. The printhead according to claim 15, wherein said

input means is adapted to continuously receive the image data and data input to said block selection circuit.

19. The printhead according to claim 15, wherein said block selection circuit includes a decoder.

5 20. The printhead according to claim 15, wherein said printing element performs printing by using heat energy.

21. The printhead according to claim 1, wherein said printing element performs printing by discharging ink.

22. A method of driving a printhead including a plurality
10 of printing elements for printing, a block selection circuit for outputting a selection signal for selecting a block of a plurality of printing elements that can be simultaneously driven, a printing control circuit for outputting a driving signal for selectively driving the printing elements,
15 together with the selection signal, to each of the printing elements in correspondence with image data, and input means for receiving external image data to be input to the printing control circuit, comprising the steps of

causing the input means to receive the external image
20 data and block selection data input to the block selection circuit in a bus format of a plurality of consecutive bits, and causing said printing control circuit to drive the printing elements of a block selected by the block selection circuit in correspondence with the image data.

25 23. The method according to claim 22, wherein the input means parallelly receives the image data over a plurality

of signal lines.

24. The method according to claim 22, wherein the input means receives data in units of 4 bits.

25. A method of driving a printhead including a plurality of printing elements for printing, a block selection circuit for outputting a selection signal for selecting a block of a plurality of printing elements that can be simultaneously driven, a printing control circuit for outputting a driving signal for selectively driving the printing elements,
10 together with the selection signal, to each of the printing elements in correspondence with image data, and input means for receiving external image data to be input to the printing control circuit, comprising the steps of

causing the input means to receive the external image
15 data in a bus format of a plurality of bits, and causing said printing control circuit to drive the printing element of a block selected by said block selection circuit in correspondence with the image data.

26. The method according to claim 25, wherein the input means parallelly receives the image data over a plurality of signal lines.
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27. The method according to claim 25, wherein the input means receives data in units of 4 bits.

28. A method of driving a printhead including a plurality of printing elements for printing, a block selection circuit for outputting a selection signal for selecting a block of
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a plurality of printing elements that can be simultaneously driven, a printing control circuit for outputting a driving signal for selectively driving the printing elements, together with the selection signal, to each of the printing elements in correspondence with image data, and input means for receiving external image data to be input to the printing control circuit, comprising the steps of

causing the input means to receive data associated with a printing element driving timing continuously with the image data, and causing the printing control circuit to drive the printing elements of a block selected by the block selection circuit in correspondence with the image data.

29. The method according to claim 28, wherein a printing element driving time is set in accordance with the data associated with the driving timing.

30. The method according to claim 28, wherein the input means receives data input to the block selection circuit together with the image data.

31. The method according to claim 28, wherein the input means continuously receives the image data and data input to the block selection circuit.

32. A data output apparatus for outputting image data and a block selection signal to input means of a printhead, said printhead including a plurality of printing elements for printing, a block selection circuit for outputting the selection signal for selecting a block of a plurality of

printing elements that can be simultaneously driven, a printing control circuit for outputting a driving signal for selectively driving said printing elements together with the selection signal to each of said printing elements in 5 correspondence with the image data, and said input means for receiving external image data to be input to said printing control circuit,

wherein said data output apparatus outputs the image data and the block selection data input to said block 10 selection circuit in a bus format of a plurality of consecutive bits.

33. The apparatus according to claim 32, wherein the image data is parallelly output to said input means over a plurality of signal lines.

15 34. The apparatus according to claim 32, wherein data is output to said input means in units of 4 bits.

35. The apparatus according to claim 32, wherein said printing element performs printing by discharging ink with using heat energy.

20 36. A data output apparatus for outputting image data to input means of a printhead, said printhead including a plurality of printing elements for printing, a block selection circuit for outputting a selection signal for selecting a block of a plurality of printing elements that 25 can be simultaneously driven, a printing control circuit for outputting a driving signal for selectively driving said

printing elements together with the selection signal to each of said printing elements in correspondence with the image data, and said input means for receiving external image data to be input to said printing control circuit,

5 wherein said data output apparatus outputs the image data in a bus format of a plurality of bits.

37. The apparatus according to claim 36, wherein said apparatus is adapted to output the image data together with data supplied to said block selection circuit to said input
10 means.

38. The apparatus according to claim 36, wherein said apparatus is adapted to output the image data and data supplied to said block selection circuit to said input means, continuously.

15 39. The apparatus according to claim 36, wherein said printing element performs printing by discharging ink with using heat energy.

40. A data output apparatus for outputting image data to input means of a printhead, said printhead including a plurality of printing elements for printing, a block selection circuit for outputting a selection signal for selecting a block of a plurality of printing elements that can be simultaneously driven, a printing control circuit for outputting a driving signal for selectively driving said
20 printing elements together with the selection signal to each of said printing elements in correspondence with the image
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data, and said input means for receiving external image data to be input to said printing control circuit,

wherein said data output apparatus outputs data associated with a printing element driving timing
5 continuously with the image data.

41. The apparatus according to claim 40, wherein the data associated with the driving timing is data for setting a printing element driving time.

42. The apparatus according to claim 40, wherein data
10 supplied to said block selection circuit is output to said input means, together with the image data.

43. The apparatus according to claim 40, wherein the image data and data supplied to the block selection circuit are continuously output to said input means.

15 44. The apparatus according to claim 40, wherein said printing element performs printing by discharging ink with using heat energy.